

10/02/13

Agenda

- Opener
- Review Homework Worksheet
  - Solving 1 & 2 Step Equations
- Section 2.3 day 1 - Solving Multi-Step Equations
  - Distribution
  - Combine Like Terms
- Start Homework 2.3 day 1
  - p. 98-100 (10-26 evens, 65, 69-71)

Warm up:  
Simplify:

$$\begin{array}{c} x+2 \\ 8 \boxed{8x+16} \end{array} \quad 8(x+2) \quad 8x+16$$

$$\begin{array}{c} |5m-23+2m| \\ \hline 7m-23 \end{array}$$

Section 2.3 - Solving Multi-Step Equations day 1 Target 2B

Review:

$$\begin{array}{r} -3x + 2 = 17 \\ -2 \quad -2 \\ \hline -3x = 15 \\ \frac{-3}{-3} \quad \frac{15}{-3} \\ \hline x = -5 \end{array}$$

$$\begin{array}{r} -3 \cdot \left( \frac{x+4}{-3} = 5 \right) \cdot 3 \\ \hline x + 4 = -15 \\ -4 \quad -4 \\ \hline x = -19 \end{array}$$

Multi-Step Equations  
(combine like terms):

$$\begin{array}{r} 5 = 5m - 23 + 2m \\ 5 = 7m - 23 \\ +23 \quad +23 \\ \hline 28 = 7m \\ \frac{28}{7} = \frac{7m}{7} \quad m = 4 \end{array}$$

$$\begin{array}{r} 11x - 8 - 6x = 22 \\ \hline 5x - 8 = 22 \\ +8 \quad +8 \\ \hline 5x = 30 \\ \frac{5x}{5} = \frac{30}{5} \\ \hline x = 6 \end{array}$$

You Try:

$$\begin{array}{r} b + 9 + 6b = 30 \\ 7b + 9 = 30 \\ -9 \quad -9 \\ \hline 7b = 21 \\ \frac{7b}{7} = \frac{21}{7} \\ \hline b = 3 \end{array}$$

$$\begin{array}{r} -2y + 5 + 5y = 14 \\ \hline 3y + 5 = 14 \\ -5 \quad -5 \\ \hline 3y = 9 \\ \frac{3y}{3} = \frac{9}{3} \\ \hline y = 3 \end{array}$$

Section 2.3 - Solving Multi-Step Equations day 1 Target 2B

Distributing  
First:

(two ways)

$$8 \overline{) \begin{array}{r} x+2 \\ 8x+16 \end{array}}$$

$$5 \overline{) \begin{array}{r} 2+4k \\ 10+20k \end{array}}$$

You Try:

DISTRIBUTE 1<sup>st</sup>

$$\begin{array}{r} 8(x+2)=64 \\ 8x+16=64 \\ -16 \quad -16 \\ \hline 8x = 48 \\ \underline{8} \quad \underline{8} \\ x=6 \end{array}$$

$$\begin{array}{r} 5(2+4k)=50 \\ 10+20k=50 \\ -10 \quad -10 \\ \hline 20k = 40 \\ \underline{20} \quad \underline{20} \\ k=2 \end{array}$$

$$\begin{array}{r} -4(x+6)=-63 \\ -4x-24=-63 \\ +24 \quad +24 \\ \hline -4x = -39 \\ \underline{-4} \quad \underline{-4} \\ x = \frac{39}{4} \end{array}$$

DIVIDE 1<sup>st</sup>

$$\begin{array}{r} 8(x+2)=64 \\ \underline{8} \quad \underline{8} \\ x+2=8 \\ -2 \quad -2 \\ \hline x=6 \end{array}$$

$$\begin{array}{r} 5(2+4k)=50 \\ \underline{5} \quad \underline{5} \\ 2+4k=10 \\ -2 \quad -2 \\ \hline 4k=8 \\ \underline{4} \quad \underline{4} \\ k=2 \end{array}$$

$$\begin{array}{r} 7(k-1)=45 \\ \underline{7} \quad \underline{7} \\ 7k-7=45 \\ +7 \quad +7 \\ \hline 7k=52 \\ \div 7 \quad \div 7 \\ \hline k = \frac{52}{7} \end{array}$$

$$\begin{array}{r} 7k-7=45 \\ +7 \quad +7 \\ \hline 7k=52 \\ \div 7 \quad \div 7 \\ \hline k = \frac{52}{7} \end{array}$$

$$7 \frac{3}{7} \\ 7.42$$